DOCUMENT RESUME

ED 429 481 HE 031 856

AUTHOR MacFarland, Thomas W.
TITLE An Analysis of Final Grades for Selected Courses in the Farquhar Center for Undergraduate Studies: Differences between On-Campus Students and Off-Campus Students.
INSTITUTION Nova Southeastern Univ., Ft. Lauderdale, FL. Research and Planning.
REPORT NO R98-11
PUB DATE 1998-10-00
NOTE 30p.
PUB TYPE Reports - Research (143)
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Academic Achievement; Administrator Education; *Business Education; College Faculty; College Instruction; College Students; *Distance Education; Extension Education; *Grades (Scholastic); Higher Education; *Teacher Education; *Undergraduate Students; Undergraduate Study; Universities
IDENTIFIERS *Nova Southeastern University FL

ABSTRACT

This study examined differences in final course grades for campus-based and distance education students in the undergraduate studies program at Nova Southeastern University (Florida). Data on 11,930 course grades for winter term 1997 were obtained from university records. It was found that students enrolled in courses offered through distance education received a significantly greater frequency of successful grades (A, B, C, or Pass) than their campus-based counterparts. In regard to six specific courses offered both on-campus and off-campus, students enrolled in two management courses received a significantly greater frequency of successful grades than their campus-based counterparts. In the other four courses, one in business and three in education, off-campus students were in parity with on-campus students in terms of relative frequency of successful grades received. An appendix provides four sets of data tables. (MDM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 429 481

AN ANALYSIS OF FINAL GRADES FOR SELECTED COURSES IN THE FARQUHAR CENTER FOR UNDERGRADUATE STUDIES: DIFFERENCES BETWEEN ON-CAMPUS STUDENTS AND OFF-CAMPUS STUDENTS

Thomas W. MacFarland

Senior Research Associate

Nova Southeastern University
Research and Planning

Report 98-11

October 1998

HE 031 856

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Thomas W. MacFarland

BEST COPY AVAILABLE

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

EXECUTIVE SUMMARY

The Office of Research and Planning provided the first comprehensive analysis of grades at Nova Southeastern University in 1996. Because of the way data were organized, it was not possible at that time to report grades based on place of class instruction (on-campus and off-campus).

Since then, Research and Planning has conducted analyses of grades by faculty affiliation status (full-time faculty and part-time faculty) and by place of class instruction (on-campus courses and off-campus courses). These analyses focused on courses taught during Winter Term 1997, with breakouts provided for each academic center.

The purpose of this report is to build on these studies and to report on grades by place of class instruction for selected courses in the Farquhar Center for Undergraduate Studies that were offered both on-campus and off-campus:

- Professional Management
  - MGMT2050 Principles of Management
  - BUSS4880 Business Strategy and Policy
  - MGMT4170 Organizational Behavior
- Education
  - EDUC4470 Teaching: Principles and Practices
  - EDUC4480 Classroom Management
  - ELEM3310 Reading Skills: Elementary School

Following guidelines established by the Southern Association of Colleges and Schools:

- All courses offered in either Broward County or Miami-Dade County were considered on-campus courses.
- All courses offered at other locations were considered off-campus courses.

This level of analysis should further support the University's many efforts to assess the comparability of campus-based courses to courses offered at distance education sites, with representation of courses in the Farquhar Center's two largest majors.

Overall, there were two courses (MGMT2050 and MGMT4170) where off-campus students received, at a significant level ($p \leq .05$), a greater frequency of successful grades than their on-campus counterparts. For the other four courses selected for this study, off-campus students were in parity with on-campus students in terms of the relative frequency of

successful grades received. There were no instances where on-campus students received at a significant level ($p \leq .05$) a greater frequency of successful grades than off-campus students.

Using the frequency of successful grades as a unit of measure, this study provides a degree of evidence that off-campus students enjoy academic success that certainly meets, and possibly even exceeds, the level of academic success experienced by on-campus students. To gain a better sense of academic achievement between on-campus students and off-campus students, this study offered the recommendation that the Farquhar Center for Undergraduate Studies should provide some type of common assessment (possibly a common final examination) in selected courses that are offered in both formats. Then, it would be possible to empirically determine achievement of on-campus students and off-campus students on an equivalent examination or other common assessment instrument.

TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	ii
LIST OF TABLES	v
BACKGROUND	1
METHODOLOGY	2
RESULTS	2
SUMMARY	3
REFERENCES	4
APPENDIX: Tables 1 to 4	5

LIST OF TABLES

Table		Page
1	Summary of Successful Grades (A, B, C, Pass) and All Other Grades by Place of Class Location and by Academic Center: Winter Term 1997	6
2	Summary of Winter Term 1997 Grades by Place of Class Location: Farquhar Center for Undergraduate Studies	8
3.A	Summary of Winter Term 1997 Grades by Place of Class Location: MGMT2050 (Principles of Management)	9
3.B	Summary of Winter Term 1997 Grades by Place of Class Location: BUSS4880 (Business Strategy and Policy)	10
3.C	Summary of Winter Term 1997 Grades by Place of Class Location: MGMT4170 (Organizational Behavior)	11
3.D	Summary of Winter Term 1997 Grades by Place of Class Location: EDUC4470 (Teaching: Principles and Practices)	12
3.E	Summary of Winter Term 1997 Grades by Place of Class Location: EDUC4480 (Classroom Management)	13
3.F	Summary of Winter Term 1997 Grades by Place of Class Location: ELEM3310 (Reading Skills: Elementary School)	14
4	Comparison of Successful Grades During Winter Term 1997 for Six Courses Offered On-Campus and Off-Campus	15

BACKGROUND

The Office of Research and Planning provided the first comprehensive analysis of grades at Nova Southeastern University in 1996 (*Grades at Nova Southeastern University: Fall Term 1993, Fall Term 1994, and Fall Term 1995*; 1996). A limitation of that report was that grades could only be reported by academic center and not by place of class instruction (on-campus and off-campus). Since then, Research and Planning has reported on grades by faculty affiliation status (*A Comparison of Final Grades Awarded by Full-Time Faculty and Part-Time Faculty by Academic Center for Winter Term 1997*; 1998) and by place of class attendance (*A Comparison of Final Grades Awarded in Campus-Based Courses and Courses Offered Through Distance Education for Winter Term 1997*; 1998).

The purpose of this report is to build on these studies and to report on grades by place of class instruction for selected courses in the Farquhar Center for Undergraduate Studies that were offered both on-campus and off-campus:

- Professional Management
  - MGMT2050 Principles of Management
  - BUSS4880 Business Strategy and Policy
  - MGMT4170 Organizational Behavior
- Education
  - EDUC4470 Teaching: Principles and Practices
  - EDUC4480 Classroom Management
  - ELEM3310 Reading Skills: Elementary School

Guidelines established by the Southern Association of Colleges and Schools were used to provide an operational definition of on-campus instruction and off-campus instruction:

- All courses offered in either Broward County or Miami-Dade County were considered on-campus courses.

  During Winter Term 1997, 67.7 percent of all grades in the Farquhar Center for Undergraduate Studies were awarded in on-campus classes.

- All courses offered at other locations were considered off-campus courses.

  During Winter Term 1997, 32.3 percent of all grades in the Farquhar Center for Undergraduate Studies were awarded in off-campus classes.

METHODOLOGY

The methodology used for *Grades at Nova Southeastern University: Fall Term 1993, Fall Term 1994, and Fall Term 1995* (1996) was quite useful and the methodology for this report largely replicates the procedures used in that prior study:

1. The computing center provided the original extract file on November 11, 1997.

   This date provided an approximate four month interim from the end of Winter Term 1997 and the creation of the extract file, allowing sufficient time for adjustment to most *Incomplete* grades and the posting of any late grades.

2. The extract file was purposely prepared so that the five column cluster code for each course was identified, allowing for later discrimination between on-campus courses and off-campus courses.

3. Administrative staff in the Farquhar Center for Undergraduate studies selected the six courses for this study. Courses were selected from both the Professional Management major and Education major, with the basis for selection based on the decision to include broadly-representative core courses from each major that were offered to both on-campus students and off-campus students.

4. Grades were organized into two separate categories:

   - Successful grades (A, B, C, and Pass)
   - All other grades

The chi-square test was then used to determine if there were differences in the frequency of successful grades awarded in campus-based courses and courses offered through distance education.

RESULTS

Table 1 provides a degree of University-wide context to the frequency of successful grades and all other grades for on-campus students and off-campus students during Winter Term 1997. Table 2 focuses exclusively on the Farquhar Center for Undergraduate Studies and the frequency of successful grades and all other grades for on-campus students and off-campus students during Winter Term 1997. For the entire center, students enrolled in courses offered through the use of distance education received a statistically significantly greater frequency of successful grades than their campus-based counterparts.

Tables 3.A to 3.F specifically relate to the six courses selected for this study. Overall, there were two courses (MGMT2050 and MGMT4170) where off-campus students received, at a significant level ($p \leq .05$), a greater frequency of successful grades than their on-campus counterparts. For the other four courses selected for this study, off-campus students were in parity with on-campus students in terms of the relative frequency of successful grades received. There were no instances where on-campus students received, at a significant level ($p \leq .05$), a greater frequency of successful grades than off-campus students.

SUMMARY

The University is compelled by the Southern Association of Colleges and Schools to demonstrate that "[ ] its distance learning programs are effective and comply with all applicable *Criteria*" (*Criteria* for Accreditation; 1998, p. 40). The Southern Association of Colleges and Schools has further compelled the University to "Provide documentation that all distance learning courses are comparable to the on-campus courses and that the goals for each off-campus site are clear and explicit and are assessed regularly" (personal communication from J. T. Rogers, July 2, 1998).

This report, in parity with findings identified in *A Comparison of Final Grades Awarded in Campus-Based Courses and Courses Offered Through Distance Education for Winter Term 1997* (1998), provides a degree of evidence that off-campus students enjoy academic success that certainly meets, and possibly even exceeds, the level of academic success experienced by on-campus students. Using the frequency of successful grades as a unit of measure, the findings of this report provide ample evidence that "distance learning courses are comparable to the on-campus courses."

To gain a better sense of academic achievement between on-campus students and off-campus students, this study offered the recommendation that the Farquhar Center for Undergraduate Studies should provide some type of standardized assessment (possibly a common final examination) in selected courses that are offered in both formats. Then, it would be possible to empirically determine achievement of on-campus students and off-campus students on an equivalent examination or other common assessment instrument.

REFERENCES

A Comparison of Final Grades Awarded by Full-Time Faculty and Part-Time Faculty by Academic Center for Winter Term 1997. (1998). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 98-09.

A Comparison of Final Grades Awarded in Campus-Based Courses and Courses Offered Through Distance Education for Winter Term 1997. (1998). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 96-10.

Grades at Nova Southeastern University: Fall Term 1993, Fall Term 1994, and Fall Term 1995. (1996). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 96-19.

Criteria for Accreditation. (1998). Decatur, Georgia: Southern Association of Colleges and Schools Commission on Colleges.

APPENDIX:

Tables 1 to 4

Table 1

Summary of Successful Grades (A, B, C, Pass) and All Other Grades by Place of Class Location and by Academic Center: Winter Term 1997

Academic Center	Successful Grades: A, B, C, Pass		All Other Grades		p	Results of Chi-Square Analysis
	Campus	Distance	Campus	Distance		
Farquhar Center for Undergraduate Studies	6,687	3,348	1,390	505	.001	Students enrolled in courses offered through distance education received a significantly greater frequency of successful grades than their campus-based counterparts.
Fischler Center for the Advancement of Education	4,906	2,421	605	164	.001	Students enrolled in courses offered through distance education received a significantly greater frequency of successful grades than their campus-based counterparts.
School of Business and Entrepreneurship	1,973	1,807	288	93	.001	Students enrolled in courses offered through distance education received a significantly greater frequency of successful grades than their campus-based counterparts.

Center for Psychological Studies . . .	1,609	499	90	46	.007	There is no difference in the frequency of successful grades awarded between students enrolled in courses offered through distance education and students who are campus-based.
All Four Academic Centers with Both Campus-Based Courses and Distance Education Courses	15,175	8,075	2,373	808	.001	Students enrolled in courses offered through distance education received a significantly greater frequency of successful grades than their campus-based counterparts.

Table 2

Summary of Winter Term 1997 Grades by Place of Class Location: All Standard Courses in the Farquhar Center for Undergraduate Studies

	Successful Grades												
	A		B		C		Pass		Subtotal		All Other Grades		Total
Faculty Status	N	%	N	%	N	%	N	%	N	%	N	%	N
Campus-Based Instruction													
Broward County	1,967	31	2,233	35	935	15	114	2	5,249	82	1,180	18	6,429
Miami-Dade County	726	44	544	33	168	10	0	0	1,438	87	210	13	1,648
Subtotal	2,693	33	2,777	34	1,103	14	114	1	6,687	83	1,390	17	8,077
Distance Education													
Subtotal	1,574	41	1,375	36	398	10	1	0	3,348	87	505	13	3,853
TOTAL	4,267	36	4,152	35	1,501	13	115	1	10,035	84	1,895	16	11,930

Null Hypothesis: There is no statistically significant difference between campus-based courses and distance education courses regarding the frequency of successful grades and all other grades awarded ($p \leq .001$).

Finding: Chi-square = 32.86 and the Null Hypothesis is rejected ($p = .001$). Students enrolled in courses offered through the use of distance education received a statistically significantly greater frequency of successful grades than their campus-based counterparts.

BEST COPY AVAILABLE

Table 3.A

Summary of Winter Term 1997 Grades by Place of Class Location: MGMT2050 (Principles of Management)

	Successful Grades												
	A		B		C		Pass		Subtotal		All Other Grades		Total
Faculty Status	N	%	N	%	N	%	N	%	N	%	N	%	N
Campus-Based Instruction													
Broward County	41	28	51	35	10	7	0	0	102	69	45	31	147
Miami-Dade County	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	41	28	51	35	10	7	0	0	102	69	45	31	147
Distance Education													
Subtotal	34	28	40	33	24	20	0	0	98	82	22	18	120
TOTAL	75	28	91	34	34	13	0	0	200	75	67	25	267

Null Hypothesis: There is no statistically significant difference between on-campus course sections and off-campus course sections regarding the frequency of successful grades and all other grades awarded ($p \leq .05$).

Finding: Chi-square = 5.30 and the Null Hypothesis is rejected ($p = .021$). Students enrolled in off-campus courses sections received a statistically significantly greater frequency of successful grades than their on-campus counterparts.

Table 3.B

Summary of Winter Term 1997 Grades by Place of Class Location: BUSS4880 (Business Strategy and Policy)

	Successful Grades												
	A		B		C		Pass		Subtotal		All Other Grades		Total
Faculty Status	N	%	N	%	N	%	N	%	N	%	N	%	N
Campus-Based Instruction													
Broward County	38	41	37	40	14	15	0	0	89	96	4	4	93
Miami-Dade County	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	38	41	37	40	14	15	0	0	89	96	4	4	93
Distance Education													
Subtotal	42	49	36	42	7	8	0	0	85	99	1	1	86
TOTAL	80	45	73	41	21	12	0	0	174	97	5	3	179

Null Hypothesis: There is no statistically significant difference between on-campus course sections and off-campus course sections regarding the frequency of successful grades and all other grades awarded ($p \leq .05$).

Finding: Chi-square = 1.62 and the Null Hypothesis is accepted ($p = .203$).

Table 3.C

Summary of Winter Term 1997 Grades by Place of Class Location: MGMT4170 (Organizational Behavior)

	Successful Grades												
	A		B		C		Pass		Subtotal		All Other Grades		Total
Faculty Status	N	%	N	%	N	%	N	%	N	%	N	%	N
Campus-Based Instruction													
Broward County	18	30	28	46	5	8	0	0	51	84	10	16	61
Miami-Dade County	12	60	4	20	2	10	0	0	18	90	2	10	20
Subtotal	30	37	32	40	7	9	0	0	69	85	12	15	81
Distance Education													
Subtotal	41	41	49	49	8	8	0	0	98	97	3	3	101
TOTAL	71	39	81	45	15	8	0	0	167	92	15	8	182

Null Hypothesis: There is no statistically significant difference between on-campus course sections and off-campus course sections regarding the frequency of successful grades and all other grades awarded ($p \leq .05$).

Finding: Chi-square = 8.34 and the Null Hypothesis is rejected ($p = .004$). Students enrolled in off-campus courses sections received a statistically significantly greater frequency of successful grades than their on-campus counterparts.

Table 3.D

Summary of Winter Term 1997 Grades by Place of Class Location: EDUC4470 (Teaching: Principles and Practices)

	Successful Grades												
	A		B		C		Pass		Subtotal		All Other Grades		Total
Faculty Status	N	%	N	%	N	%	N	%	N	%	N	%	N
Campus-Based Instruction													
Broward County	15	26	25	44	5	9	0	0	45	79	12	21	57
Miami-Dade County	22	28	36	46	8	10	0	0	66	84	13	16	79
Subtotal	37	27	61	45	13	10	0	0	111	82	25	18	136
Distance Education													
Subtotal	40	45	21	24	11	13	0	0	72	82	16	18	88
TOTAL	77	34	82	37	24	11	0	0	183	82	41	18	224

Null Hypothesis: There is no statistically significant difference between on-campus course sections and off-campus course sections regarding the frequency of successful grades and all other grades awarded ($p \leq .05$).

Finding: Chi-square = 0.01 and the Null Hypothesis is accepted ($p = .970$).

BEST COPY AVAILABLE

Table 3.E

Summary of Winter Term 1997 Grades by Place of Class Location: EDUC4480 (Classroom Management)

	Successful Grades												
	A		B		C		Pass		Subtotal		All Other Grades		Total
Faculty Status	N	%	N	%	N	%	N	%	N	%	N	%	N
Campus-Based Instruction													
Broward County	25	38	18	28	11	17	0	0	54	83	11	17	65
Miami-Dade County	22	29	34	45	6	8	0	0	62	83	13	17	75
Subtotal	47	34	52	37	17	12	0	0	116	83	24	17	140
Distance Education													
Subtotal	30	37	29	36	9	11	0	0	68	84	13	16	81
TOTAL	77	35	81	37	26	12	0	0	184	83	37	17	221

Null Hypothesis: There is no statistically significant difference between on-campus course sections and off-campus course sections regarding the frequency of successful grades and all other grades awarded ($p \leq .05$).

Finding: Chi-square = 0.04 and the Null Hypothesis is accepted ($p = .833$).

Table 3.F

Summary of Winter Term 1997 Grades by Place of Class Location: ELEM3310 (Reading Skills: Elementary School)

	Successful Grades												
	A		B		C		Pass		Subtotal		All Other Grades		Total
Faculty Status	N	%	N	%	N	%	N	%	N	%	N	%	N
Campus-Based Instruction													
Broward County	8	24	13	38	6	18	0	0	27	79	7	21	34
Miami-Dade County	11	23	26	55	9	19	0	0	46	98	1	2	47
Subtotal	19	23	39	48	15	19	0	0	73	90	8	10	81
Distance Education													
Subtotal	22	39	18	32	8	14	0	0	48	84	9	16	57
TOTAL	41	30	57	41	23	17	0	0	121	88	17	12	138

Null Hypothesis: There is no statistically significant difference between on-campus course sections and off-campus course sections regarding the frequency of successful grades and all other grades awarded ($p \leq .05$).

Finding: Chi-square = 1.08 and the Null Hypothesis is accepted ($p = .298$).

BEST COPY AVAILABLE

Table 4

Comparison of Successful Grades During Winter Term 1997 for Six Courses Offered On Campus and Off Campus

Course	Chi-square	p	Significant difference at $p \leq .05$	
MGMT2050	5.30	.021	Yes	Off Campus > On Campus
BUSS4880	1.62	.203	No	Off Campus = On Campus
MGMT4170	8.34	.004	Yes	Off Campus > On Campus
EDUC4470	0.01	.970	No	Off Campus = On Campus
EDUC4480	0.04	.833	No	Off Campus = On Campus
ELEM3310	1.08	.298	No	Off Campus = On Campus